

Appl. No. 10/604,855
Amdt. dated December 13, 2004
Reply to Office action of October 21, 2004

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Amendments to the Claims:

Listing of Claims:

- 5 Claim 1 (original) A capacitive acceleration sensor comprising:
a non-single-crystal-silicon-based substrate;
a polysilicon beam structure having a movable section, the
movable section comprising a movable electrode;
10 a polysilicon supporter positioned on the
non-single-crystal-silicon-based substrate for fixing the beam
structure and forming a distance between the beam structure and
the non-single-crystal-silicon-based substrate;
a stationary electrode positioned on the
15 non-single-crystal-silicon-based substrate and opposite to the
movable section of the beam structure, the stationary electrode
and the movable electrode constituting a plate capacitor; and
a thin film transistor (TFT) control circuit positioned on the
non-single-crystal-silicon-based substrate and electrically
connected to the plate capacitor.
20
- Claim 2 (original) The capacitive acceleration sensor of claim 1 wherein
the non-single-crystal-silicon-based substrate is a glass substrate.
- Claim 3 (original) The capacitive acceleration sensor of claim 2 wherein
25 the TFT control circuit is a low temperature polysilicon TFT control
circuit.

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Claim 4 (original) The capacitive acceleration sensor of claim 1 wherein the non-single-crystal-silicon-based substrate is a quartz substrate.

5 Claim 5 (original) The capacitive acceleration sensor of claim 4 wherein the TFT control circuit is a high temperature polysilicon TFT control circuit.

10 Claim 6 (original) The capacitive acceleration sensor of claim 1 wherein the stationary electrode comprises aluminum (Al), titanium (Ti), platinum (Pt), or alloys.

Claim 7 (original) The capacitive acceleration sensor of claim 1 wherein the beam structure and the supporter are formed simultaneously.

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Claim 8 (cancelled)

20 Claim 9 (original) The capacitive acceleration sensor of claim 1 wherein the movable electrode comprises doped polysilicon or a conductive material.

25 Claim 10 (previously presented) The capacitive acceleration sensor of claim 1 wherein the non-single-crystal-silicon-based substrate further comprises a thin film transistor display region for displaying a variation detected by the capacitive acceleration sensor.

Claim 11 (currently amended) A capacitive acceleration sensor comprising:
an insulating substrate;

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- 5 a cantilever beam structure positioned on the insulating substrate having a movable section, the movable section comprising a movable electrode;
- 10 a stationary electrode positioned on the insulating substrate and opposite to the movable section of the cantilever beam structure, the stationary electrode and the movable electrode constituting a plate capacitor; and
- 15 a thin film transistor control circuit positioned on the insulating substrate and electrically connected to the plate capacitor, the thin film transistor control circuit being a low temperature polysilicon thin film transistor control circuit.

15 Claim 12 (original) The capacitive acceleration sensor of claim 11 wherein the stationary electrode comprises aluminum (Al), titanium (Ti), platinum (Pt), or alloys.

20 Claim 13 (original) The capacitive acceleration sensor of claim 11 wherein the cantilever beam structure comprises polysilicon.

Claim 14 (original) The capacitive acceleration sensor of claim 11 wherein the movable electrode comprises doped polysilicon or a conductive material.

25 Claim 15 (original) The capacitive acceleration sensor of claim 11 wherein the insulating substrate is a glass substrate.

Claim 16 (cancelled)

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Claim 17 (cancelled)

Claim 18 (cancelled)

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Claim 19 (cancelled)

10 Claim 20 (previously presented) The capacitive acceleration sensor of claim 11 wherein the thin film transistor control circuit is electrically connected to the plate capacitor via a flexible printed circuit (FPC) board.

15 Claim 21 (previously presented) The capacitive acceleration sensor of claim 11 wherein the insulating substrate further comprises a thin film transistor display region for displaying a variation detected by the capacitive acceleration sensor.

Claim 22 (new) A capacitive acceleration sensor comprising:

20 an insulating substrate;
a cantilever beam structure positioned on the insulating substrate having a movable section, the movable section comprising a movable electrode;
a stationary electrode positioned on the insulating substrate and opposite to the movable section of the cantilever beam structure, the stationary electrode and the movable electrode
25 constituting a plate capacitor; and
a thin film transistor control circuit positioned on the insulating substrate and electrically connected to the plate capacitor, the thin film transistor control circuit being a high

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temperature polysilicon thin film transistor control circuit.

5 **Claim 23 (new)** The capacitive acceleration sensor of claim 22 wherein the stationary electrode comprises aluminum (Al), titanium (Ti), platinum (Pt), or alloys.

10 **Claim 24 (new)** The capacitive acceleration sensor of claim 22 wherein the cantilever beam structure comprises polysilicon.

Claim 25 (new) The capacitive acceleration sensor of claim 22 wherein the movable electrode comprises doped polysilicon or a conductive material.

15 **Claim 26 (new)** The capacitive acceleration sensor of claim 22 wherein the insulating substrate is a quartz substrate.

20 **Claim 27 (new)** The capacitive acceleration sensor of claim 22 wherein the thin film transistor control circuit is electrically connected to the plate capacitor via a flexible printed circuit (FPC) board.

25 **Claim 28 (new)** The capacitive acceleration sensor of claim 22 wherein the insulating substrate further comprises a thin film transistor display region for displaying a variation detected by the capacitive acceleration sensor.